





Recommendation 11 – Improve Water Data Management and Scientific Understanding

DWR and other State agencies must improve data, analytical tools, and information management and exchange needed to prepare, evaluate, and implement regional integrated resource plans and programs in cooperation with other federal, tribal, local, and research entities.

California needs better data and analytical tools to produce useful and more integrated information on water quality, environmental objectives, economic and equity issues, and surface water and groundwater interaction. A consortium of public and private entities, with State leadership and stakeholder input, should prepare a long-term plan to improve and peer review data and analytical tools, as well as to develop presentation and decision-support tools to make complex technical information more accessible to decision-makers and resource managers. DWR should build and maintain the Water Plan Information Exchange (Water PIE), an online information management system to assist regional and local agencies and governments, which would include information from locally-developed urban and agricultural water management plans and local general plans.

Action Plan

-  DWR with regional input will develop a general checklist of issues, resources, data, and analytical tools as well as guidelines to aid regional integrated resource planning.
-  DWR will select and/or develop the analytical tools and data in support of the next water plan update.
-  DWR will develop the Water Plan Information Exchange (Water PIE) for collecting and sharing data, and networking existing databases and Web sites, among State, federal, regional, and local agencies and governments and citizen monitoring efforts, to improve analytical capabilities and developing timely surveys of statewide land use, water use, and estimates of future implementation of resource management strategies.
-  DWR will participate in efforts by the California Water and Environmental Model Forum to develop and carry out a plan for long-term improvement of analytical tools and data for statewide planning.

Intended Outcomes

- Strategic plan for the long-term improvement of analytical tools and data for statewide planning.
- Inventory of existing data and tools, resulting in identification of key data and tool gaps.

- A conceptual analytical framework and analytical work plan for the next water plan update that is accepted by water stakeholders.
- Begin implementation of elements of the Water Plan Information Exchange.

Resource Assumptions

- Developing the long-term plan for analytical tools and data and the work plan for the Water Plan Information Exchange could be accomplished with existing resources.
- Limited implementation could be accomplished with existing resources, but full implementation would require additional resources or redirection of existing staff.

Implementation Challenges

- Developing the institutional relationships with other local, State, and federal agencies necessary for integrating information between different planning efforts.
- Adoption of data and data management guidelines, principles and standards by local, State, and federal agencies and programs needed to promote data and information sharing.
- Inadequate resources to develop Water Plan Information Exchange database.

Performance Measures

- Progress in completing and implementing plan for the long-term improvement of analytical tools and data for statewide planning.
- Progress in completing and implementing the work plan for the creation of the Water Plan Information Exchange.
- Progress in evaluating the performance of alternative mixes of management strategies using multiple future scenarios and the evaluation categories in Table 5-2 (Evaluation categories for achieving water management objectives).